

How to Use the VBWriter Application on your Phone

About VBWriter

VBWriter allows the user to practice creating Braille letters by double-tapping where dots in the letter should be raised. It is an application suitable for blind, low-vision and sighted users who wish to practice writing Braille letters.

The touchscreen surface is divided evenly into six regions, each of which contains one of the six dots found in the standard Braille cell. The dots are numbered with dots 1 through 3 down the left side of the screen and dots 4 through 6 down the right side. When a region is initially touched, its number is spoken. It is possible to toggle the speaking of numbers off and on by quickly swiping right or left across the screen.

All dots start out empty -- an empty dot is the same as a non-raised dot in a paper-based Braille cell. Solid (or filled) dots represent raised dots and a dot can be filled in by double-tapping on it. Once a dot is filled, it will vibrate when touched. (More accurately, touching the region containing a dot triggers the haptic device so that the entire phone vibrates.) Filled dots can be made empty by double-tapping on them. Empty dots do not vibrate.

To help distinguish one row of dots from another, on the android version, the vibration frequency between rows of dots is varied -- meaning the feel of the vibration in the middle row differs from that of the top and bottom rows. To maximize the benefit of these differences, players should begin their touch in the upper left-hand corner of the screen and drag down the column before moving to the second column and repeating the downward dragging motion. Additionally, each region is separated from its neighboring regions by a small, non-vibrating border in order to help the user distinguish where the regions start and stop.

Running the Program

- 1) Start the application by selecting the VBWriter application from your phone's application menu.
- 2) Hold the phone vertically (in Portrait orientation) with the buttons at the bottom.
- 3) Some brief instructions for how to use the application are spoken, then the application will tell you which letter to enter.
- 4) Use your finger to navigate to the dots that should be raised -- dot numbers are spoken when touched to help you navigate to the desired dot. After you hear the number you want, double tap in that same location.
- 5) The application will respond verbally that the dot has been added and the dot will begin vibrating when touched. (Note: the dot will be added in the location where the double tap occurs. The regions are fairly large so unless your finger is right on the border area between regions, you should be able to add dots accurately to the dot number last spoken.)

- 6) If you need to remove a dot, navigate to it and double tap. Again the application will respond that the dot has been removed and the dot will no longer vibrate when touched.
- 7) Alternatively, on the android version, you can raise or lower dots using the numbers 1 - 6 on the phone's keypad. You can also use the following letters to indicate the dots: Q = dot 1, W = dot 2, E = dot 3, R = dot 4, T = dot 5, and Y = dot 6.
- 8) When you are finished entering the dots in the current letter, fling right with two fingers to find out if you entered the Braille symbol correctly. If you did, you will hear "that is correct!" and then name of the next letter to enter will be spoken. If you entered the letter incorrectly, the application will attempt to find a match for the dots you entered and tell you what letter you wrote. It will then vibrate the correct dots on the screen so that by touching them, you can determine which dots should have been raised and lowered. When you are ready to move on to the next letter, fling right with two fingers again.
- 9) To hear instructions, swipe down with two fingers.
- 10) Press the Menu button to repeat the name of the letter to enter.
- 11) To exit the application, press the Back button, and you will be told how many letters you wrote correctly.